

## Investigate total protein level and salivary albumin in patients with oral squamous cell carcinoma

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### ★Abstract

**Background:** Oral squamous cell carcinoma (OSCC) is the most common oral cavity neoplasia. Therefore, recognition of OSCC markers are essential for early diagnosis. The analysis of changes in serum total protein and albumin in OSCC may be a way for controlling the mortality of patients.

**Objective:** The aim of this study was to investigate the total protein level and salivary albumin in patients with OSCC.

**Methods:** This case-control study was conducted in 2015-2017. Thirty patients with OSCC were selected based on clinical and pathological examinations as a case group that referring to oral diseases department of Zahedan School of Dentistry and 30 individuals healthy subjects were selected as a control group. Unstimulated saliva was collected from both groups. Total protein level and salivary albumin of the two groups were measured by ELISA. The independent T-test and Chi-square test were used to compare total protein level and salivary albumin between the two groups.

**Findings:** The results showed that salivary albumin level in the case group was significantly higher than the control group ( $P < 0.05$ ). Salivary total protein level in the case group was similar to the control group.

**Conclusion:** It seems that salivary albumin levels could be used as a biomarker for the detection of OSCC and further studies are recommended to determine the total protein as a biomarker in early detection of malignant lesions.

**Keywords:** Oral Squamous cell carcinoma, Albumin, Total proteins, Saliva

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